



DEPARTMENT OF THE NAVY  
JOINT REGION MARIANAS  
PSC 455 BOX 211  
FPO AP 96540-1000

JTREGMARIANASINST 8020.4A  
J3  
29 Oct 2024

JTREG MARIANAS INSTRUCTION 8020.4A

From: Commander, Joint Region Marianas

Subj: DETERMINATION OF BEDROCK (SOLID ROCK FORMATION) OR IN SITU NATIVE STRATIFIED SOIL HORIZON CONDITIONS WHILE CONDUCTING EXPLOSIVES SAFETY SUBMISSION (ESS) OPERATIONS IN JOINT REGION MARIANAS (JRM) AREA OF RESPONSIBILITY (AOR)

Ref: (a) Explosives Safety Submission for Munitions Response Sites, Guam Construction Support, Current Amendment  
(b) Explosives Safety Submission for Munitions Response Sites, Tinian Construction Support, Current Amendment  
(c) JTREGMARIANASINST 8020.6  
(d) Secretarial Delegation of Risk Acceptance Authority for Munitions Response within Joint Region Marianas 06 May 2024

Encl: (1) Subsurface MEC/MPPEH Removal Flowchart

1. Purpose. To provide acceptable standards for the determination of bedrock (solid rock formation) or *in situ* native soil conditions (i.e., in-place native stratified soil horizons) while conducting operations under an Explosive Safety Submission (ESS) in accordance with (IAW) references (a) and (b) and any subsequent updates and any other Department of Defense Explosive Safety Board (DDESB) approved and Naval Ordnance Safety and Security Activity (NOSSA) endorsed ESSs, in the Joint Region Marianas (JRM) Area of Responsibility (AOR).

2. Cancellation. JTREGMARIANASINST 8020.4.

3. Applicability. This instruction is applicable to all construction, maintenance, and repair projects, and advanced planning activities supporting such projects or repair activities in the JRM AOR.

4. Background. Munition Response Explosive Safety requirements for construction, maintenance, and repair projects, and advanced planning activities supporting such projects or repair activities on Guam and in the Commonwealth of the Northern Mariana Islands (CNMI) are the result of combat activities on the islands during WWII. As such, the type and depth of ordnance used to establish an explosive safety requirement is dependent on soil and bedrock depth at the time of conflict as well as the potential presence of fill material potentially containing Munitions and Explosives of Concern (MEC)/Materials Potentially Presenting an

Explosive Hazard (MPPEH) overlying bedrock or *in situ* soil. In references (a) and (b), bedrock (solid rock formation) is mentioned but not defined. Additionally, references (a) and (b) do not provide guidance on utilization of site-specific data on *in situ* native stratified soil horizon conditions as a means of making a low likelihood (unlikely) determination for encountering MEC/MPPEH.

5. Policy. Throughout the project delivery, a competent authority with formal contractual approval and acceptance will establish a JRM process to determine bedrock (solid rock formation) or *in situ* native stratified soil horizon conditions while conducting ESS operations IAW with DDESB-approved and NOSSA endorsed ESSs in the JRM AOR.

6. Responsibilities

- a. JRM J3 will oversee enforcement of this policy.
- b. JRM J4 will oversee execution of this policy.
- c. Construction Field Offices shall provide Quality Assurance (QA) monitoring contractors.
- d. MEC contractors will execute with Prime Contractor oversight.

7. Action

a. Determinations of bedrock or *in situ* native stratified soil horizons must be made by a competent authority. A competent authority for bedrock or *in situ* native stratified soil horizons is a licensed Professional Geologist or a Civil Engineer with Professional Engineer (PE) license or cultural resource subject matter expert (e.g. archaeologist) with Secretary of Interior Qualifications.

b. Determinations shall be made, in writing, and must include all of the following:

- (1) Certifying stamp from the competent authority as specified in paragraph 6a;
- (2) Three-dimensional Global Positioning System (GPS) coordinates, including grid and depth, outlining the area for which the determination is being made with the planned goal of making recognizable geometric shapes that identifies and confines the bedrock or *in situ* native stratified soil formation area to be a limited shape on a map to be recorded on a Geospatial Information System (GIS) Database. All locational information/map products shall be in the WGS 1984 UTM Zone 55N coordinate system;
- (3) Methods and/or criteria used by competent authority to make the bedrock or *in situ* native stratified soil horizon determination; and
- (4) Photographs of the area that is being determined as bedrock or *in situ* native stratified soil horizons.

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c. Before competent authority makes the bedrock or *in situ* native stratified soil horizons determination, the contractor must fully expose the top layer of the entire area over which determination is being made, plus six additional inches for *in situ* native soil horizons. This area shall be scanned and determined to be anomaly free IAW the relevant ESS or ESS annex (e.g., MEC Contractor with MEC QA). If anomalies are detected, the anomalies must be investigated and removed utilizing a manual unintentional detonation operation IAW references (a) and (b) down to the depth of construction. If any anomalies are below the depth of construction, they will be recorded as “Left in Place”. The existence of the discovered anomaly during the determination process shall be documented including mapping on a master plan or equivalent.

d. The MEC QA Specialist will recommend, in writing, to the Contracting Officer (KO) or Contracting Officer Representative (COR), their acceptance or rejection. Upon acceptance by the KO in writing, the defined area shall be considered low likelihood for encountering MEC/MPPEH. As part of the acceptance process, a written designation of low likelihood must be issued from the KO or COR to the contractor that acknowledges the planned area to proceed as bedrock or *in situ* native stratified soil formation and then directs the contractor to utilize On-Call Construction Support until all excavation is complete. The following statement will also be included: In the event of a MEC or MPPEH discovery in an area previously classified as low likelihood due to an *in situ* native stratified soil horizons determination, work shall be stopped, and the Project Management Team will notify the Naval Facilities Engineering Systems Command (NAVFAC) Marianas MEC Program Manager and the JRM Explosive Safety Office in compliance with reference (c) and request guidance on how to proceed in accordance with reference (d).

e. A bedrock or *in situ* native stratified soil horizons determination shall only be valid for the area defined after acceptance by the Government. Anywhere outside of the area defined in the original submission shall require a separate submission prior to being managed as low likelihood.

f. After Government acceptance, the bedrock or native stratified soil horizons determination shall be provided to the JRM MEC Data Exchange (m-gu-jrm-mec@fe.navy.mil) within 15 days of Government acceptance for inclusion in the GIS. The GIS administrator will confirm with the generator once the data is verified and loaded.

## 8. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy Assistant for Administration (DONAA), Directives and Records Management Division (DRMD) portal page at <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx>.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, contact your local records manager or the OPNAV Records Management Program (DNS-16).

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9. Review of Effective Date. Per OPNAVINST 5215.17A, JRM J3 will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.



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**Releasability and Distribution:**

This instruction is cleared for public release and is available electronically only via CNIC SharePoint at <https://flankspeed.sharepoint-mil.us/sites/CNICGlobalHub/directives/Directives/JRMRegion.aspx>

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**SUBSURFACE MEC/MPPEH REMOVAL FLOWCHART**

